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ABSTRACT

The factors affecting undergraduate-level agriculture students' interest in online courses were examined through a survey instrument that was voluntarily completed by 166 of the 240 students enrolled in the course titled Professional Leadership and Development, which was offered as a traditional face-to-face course at Texas A&M University in fall 1999 and spring 2000. Although 67.5% of the respondents had never taken a distance education course, 60.8% indicated that they would have been interested in taking the course via the Internet. No significant relationships between interest in taking a course via the Internet and gender, ethnicity, college, number of hours enrolled, or number of hours employed were found. Of the respondents, 77.8% indicated a willingness to spend 16-45 minutes per session (average of 30 minutes) on a 3-credit hour course delivered via the Internet. The respondents ranked the various delivery options mentioned as follows: (1) audio, (2) graphics, (3) video, (4) text, and (5) self-evaluated test questions. When asked to select their preferred delivery method for college courses, 62% of the respondents selected "traditional classroom course," 26% selected "stand-alone Internet course," and 12% selected "written correspondence course," while 12% preferred other options. Most respondents (76.3%) preferred an Internet-based course with a weekly or monthly meeting. (Contains 17 references.) (MN)

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ED 449 344

INTEREST IN ONLINE LEADERSHIP EDUCATION AND IMPLICATIONS FOR INSTRUCTIONAL DESIGN STRATEGIES

Barry L. Boyd and Theresa P. Murphrey

Introduction and Theoretical Framework

Leadership skills are essential for everyone, both as members and leaders of groups (Gatchell, 1989). Madeleine F. Green (1992) observed that while many people learn leadership as they go, in an unplanned and serendipitous way, it is also possible not to learn from experience or by observing others. She concludes, "The central question, then, for developing effective leadership is how can these efforts be made deliberate and purposeful rather than accidental or serendipitous" (p. 59). It is widely agreed by leadership scholars that leadership can be taught (Bennis, 1989; Bass & Avolio, 1994; Kouzes & Posner, 1987). In its guidebook for leadership development, the Higher Education Research Institute states, "Higher education has a vital role to play in educating each new generation of leaders. Effective leadership is an especially acute issue in modern American society given its increasing complexity and fluidity and its myriad social, economic, political and educational problems" (1995, p.2).

As a result, many universities have developed courses that teach leadership theory and practice. Agricultural Education 340, "Professional Leadership Development," is an upper-level leadership course taught at Texas A&M University. This course consists of two one-hour lectures and a one-hour small group laboratory per week. Leadership concepts are introduced during the lecture period and laboratories provide the opportunity to apply the concepts. Agricultural Education 340 is a required course for the approximately 800 students in the Department of Agricultural Education and Agribusiness Majors in the Department of Agricultural Economics. The course is also listed as a Social Sciences elective in Texas A&M's core curriculum. As a result, 40% of the students enrolled in Agricultural Education 340 each semester are not required to take the course, but take the course as an elective. Approximately 650 students complete the course annually. Currently, the demand for the course surpasses the capacity within the Department of Agricultural Education. There exists a need for alternative methods of delivering leadership education to meet this demand.

"The World Wide Web provides a powerful new resource for education in agriculture and the life sciences" (O'Kane & Armstrong, 1997, p.10). This new resource, the Internet, is providing opportunities to reach more students in innovative and creative ways. Instruction delivered via a computer has been shown to be effective in engineering, microbiology, anatomy, and medical education programs (Fasce, Ramirez, & Ibanez, 1995; Inglis, Fu, & Kwokchan, 1995; Jones & Kane, 1994; Tothcohen, 1995). This delivery method has been developed to permit individuals to learn facts and analyze decisions in areas such as farm safety, landscape design, and construction. In addition, in a book entitled The No Significant Difference Phenomenon, Russell (1999) presented 355 studies showing that there is no significant difference between achievement of students who received instruction in a traditional classroom and those who received

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instruction through other means. Thus, it can be theorized that instruction delivered via a computer can be effectively used to deliver other topics.

A June 1998 survey found that computing and information technology are "core components of the campus environment and classroom experience" (Green, 1998). As noted by Willis in "Effective Practice: The View from Across the Nation" (1998), teachers need to serve as facilitators instead of instructors in order to be successful in delivering instruction online. While other studies have asked the question, "should we deliver instruction using the Internet," they have failed to determine the level of interest held by students in regard to taking a course using these means and, more importantly, to determine factors that can affect the quality of the instruction delivered. Thus, the need for the study reported here.

Purpose and Objectives

The purpose of this study was to identify student interest in participating in an upper-level undergraduate course, AGED 340, "Professional Leadership Development," and other college courses through the Internet and to identify factors to consider when designing instruction for Internet-based courses. The specific objectives of the study were as follows:

1. To determine the interest of students in taking a course through the Internet, rather than meeting in a traditional face-to-face classroom.
2. To identify student characteristics that influence interest in taking a course through the Internet.
3. To identify instructional design considerations based on importance placed on various features by students.

Methods and Procedures

Research Design

The research design used for the study was a descriptive survey method.

Population and Sample

The population for the study consisted of 240 students enrolled in Agricultural Education (AGED) 340, "Professional Leadership Development," during the Fall 1999 and Spring 2000 semesters at Texas A&M University in College Station, Texas. The sample included the 166 students who self-selected to complete the survey that was made available on the Internet.

Instrumentation

The researchers developed the survey instrument in consultation with test development experts. Faculty within the Department of Agricultural Education at Texas A&M University reviewed the instrument for face and content validity. Approximately 50 students reviewed the instrument for readability and understanding. The instrument contained seven questions to identify personal characteristics, three questions to identify interest in non-traditional courses, five questions related to computer experience, fourteen questions related to instructional design preference, and thirty-five Likert-type questions related to instructional design and online learning. The response choices for the Likert scales were: 1 = "Strongly Disagree," 2 = "Disagree," 3 = "Unsure/No Opinion," 4 = "Agree," and 5 = "Strongly Agree." The survey concluded with two open-ended questions related to students' perceptions concerning the benefits and drawbacks of Internet-based courses.

Cronbach's Coefficient Alpha was used to quantify internal consistency of the Likert-type portion of the instrument. One Likert-type question was eliminated from the study due to error in development. The remaining 34 Likert-type questions yielded a coefficient alpha of .7780. Fourteen of the 34 Likert-type questions were combined into five measurement scales. Cronbach's Coefficient Alpha for the five measurement scales ranged from .6899 to .8126. The five individual measurement scales are provided in Table 1. Nunnally (1967) suggested that in the early stages of research a modest reliability of .60 or .50 will suffice. Thus, no additional questions were eliminated from the study.

Table 1. Likert Scale Categories and Descriptive Statistics, Student Interest in Taking a Course via the Internet, Texas A&M University, Fall 1999 and Spring 2000 (n=166).

Categories	Mean	SD	Alpha	# of Questions
Frequency of E-mail and Internet Use	4.45	.723	.6899	2
Importance of Instructor Interaction	2.28	.873	.7791	2
Importance of Classmate Interaction	3.47	.844	.7287	3
Interest in Taking Courses Via the Internet	3.77	.909	.8126	3
Self-perceptions of Time Management	3.07	.783	.7775	4

Note: 1 = Strongly Disagree, 2 = Disagree, 3 = Unsure/No Opinion, 4 = Agree, and 5 = Strongly Agree

Data Collection and Analysis

The instrument was placed on the Internet and students entered their responses directly into the online survey. The Statistical Package for the Social Sciences (SPSS) computer program was used to analyze the data. Descriptive statistics consisting of means, standard deviations, and percentages were used to describe the sample. Chronbach's Coefficient Alpha was used to determine the reliability of the instrument as well as the

five measurement scales. Pearson's Product Moment Correlations were computed to examine relationships among variables and one-way ANOVAs were used to examine differences between means.

Results

Sample Profile

The profile of the sample is based on questions related to personal characteristics and computer experience. A total of 166 students (almost 70% of the population) completed the survey. The sample of students consisted of 54% females and 46% males. Eleven of the students were married. Eighty-eight percent of the respondents were Anglo, 10% Hispanic, 1% African-American and 1% Asian/Indian. Seventy-five percent of the students in the sample were enrolled in the College of Agriculture and Life Sciences. Representation from other colleges was as follows: College of Liberal Arts, 8.4%; College of Engineering, 7.2%; College of Education, 3.0%; College of Architecture, 2.4%; College of Business, 1.8%; College of Veterinary Science, 1.2%; College of Science, 0.6%; and College of Medicine, 0.6%.

Almost 57% of the respondents were enrolled in fourteen or more hours of coursework during the semester. An additional 41% carried a load of 9-13 hours while the remaining students were enrolled for eight or less credit hours. (A student must be enrolled a minimum of twelve credit hours to be considered a full-time student at Texas A&M University.)

More than half of the students were employed in some capacity. Twenty-two percent of the respondents worked 10-19 hours per week in addition to attending classes. Another 19% worked 20-29 hours/week while slightly more than 7% worked 30 or more hours/week.

As revealed in Table 2, the population can be described as computer users because 92.8% indicated convenient access to a personal computer and 86.7% indicated access to the Internet at home. Only 2.4% of the students described their computer use as "limited." All the students reported that they were comfortable using Microsoft Word, but only 30% were comfortable with Corel WordPerfect. In addition, 76.5% of the students indicated that they were comfortable using Microsoft PowerPoint.

Objective One: Student Interest in Taking a Course Via the Internet

Students expressed interest in taking courses using distance education delivery methods as indicated in Table 3. While a high percent (67.5%) of the students had not taken a course via distance education, 60.8% indicated that they would have been interested in taking AGED 340 via the Internet. More than 80% of the students indicated that they would be interested in taking one or more college courses through the Internet, rather than in a traditional face-to-face classroom. In contrast, the three Likert-type

Table 2. Computer Experience Reported by Undergraduate Students, Texas A&M University, Fall 1999 and Spring 2000 (n=166).

Question	Response	n	%
Do you have convenient access to a personal computer?	YES	154	92.8
	NO	11	6.6
Do you have access to the Internet at home?	YES	144	86.7
	NO	22	13.3
If you have access to the Internet at home, how are you connected?	Modem (baud rate: 9600)	2	1.2
	Modem (baud rate: 14.4)	3	1.8
	Modem (baud rate: 28.8)	21	12.7
	Modem (baud rate: 56K)	55	33.1
	Cable modem	8	4.8
	ISDN	0	0
	Ethernet	14	8.4
	I do not know.	44	26.5
How would you describe your level of computer use?	Limited	4	2.4
	Moderate	100	60.2
	Extensive	62	37.3
Which of the following computer programs do you feel comfortable using?	Microsoft Word	166	100
	Corel WordPerfect	50	30.1
	Microsoft PowerPoint	127	76.5
	Microsoft Excel	131	78.9
	Microsoft Access	58	34.9

questions designed to measure student interest in taking courses via the Internet yielded a mean of 3.77 (SD = .909) indicating only slight interest in online course delivery.

Students who were interested in taking AGED 340 via the Internet (Mean=2.52, SD=.876) rated instructor interaction significantly higher at the .01 level (F =21.08) than students who preferred to take the course in a traditional face-to-face classroom (Mean=1.91, SD=.737). In contrast, students who preferred taking AGED 340 in a traditional face-to-face classroom rated classmate interaction more important than students wishing to take it via the Internet.

Objective Two: Student Characteristics Influencing Interest in Taking Courses Via the Internet

Student characteristics were examined to determine their influence on student interest in online courses. Analysis of the Pearson product moment correlations between students' gender, ethnicity, college, number of hours enrolled, and the number of hours employed per week and the students' interest in taking AGED 340 or other college courses via the Internet revealed no significant relationships.

Table 3. Student Interest in Non-traditional, Distance Education Course Delivery, Texas A&M University, Fall 1999 and Spring 2000 (n=166).

Question	Response	n	%
Have you taken a course using a distance education delivery method (TTVN, Video Conference, Internet, Written Correspondence) in which you did not meet in a traditional face-to-face classroom?	YES:	54	32.5
	NO:	112	67.5
If the opportunity had been available, would you have been interested in taking AGED 340 through the Internet?	YES:	101	60.8
	NO:	65	39.2
If given the opportunity, how many of your college courses in a semester would you be interested in taking through the Internet, rather than meeting in a traditional face-to-face classroom?	0 Courses:	33	19.9
	1 Course:	49	29.5
	2 Courses:	63	38.0
	3 Courses:	9	5.4
	4 Courses:	12	7.2

Evaluating the responses to four Likert-type questions regarding the students' self-perceptions of time management revealed they were unsure of these skills (Mean = 3.07, SD = .783). Almost 69% of the respondents indicated that they learned best in either a quiet place (26.5%) or at a personal workspace at home (42.4%). As can be seen in Table 1, students indicated frequent use of e-mail and the Internet (Mean=4.45, SD=.723); however, they were less familiar with online discussion tools such as chat rooms (Mean=3.69, SD=1.22) and discussion boards (Mean=2.94, SD=1.21). It is possible that these factors could influence interest in participating in online courses.

Objective Three: Instructional Design Considerations Based on Student Preference

Instructional design considerations were evaluated based on student perceptions of importance. Students were asked, "On average, how many minutes per session would you be willing to spend on a three-credit hour course provided through the Internet (not including the completion of assignments)?" As seen in Figure 1, 129 (77.8%) of the students indicated they would spend 16-45 minutes per session (30 minute average). When asked, "On average, how many hours per week would you be willing to spend on a three-hour course provided through the Internet (not including the completion of assignments)," 38.2% of the students indicated they were willing to spend 2.5 hours (normal class time)/week on an Internet course. The remaining responses were split as follows: 45.5%, less than 2.5 hours and 16.3%, greater than 2.5 hours.

In response to the question, "If a course were designed to help you learn best, how would the information be presented," on average, students ranked the delivery options in the following order of preference: 1) audio, 2) graphics, 3) video, 4) text, and 5) self-

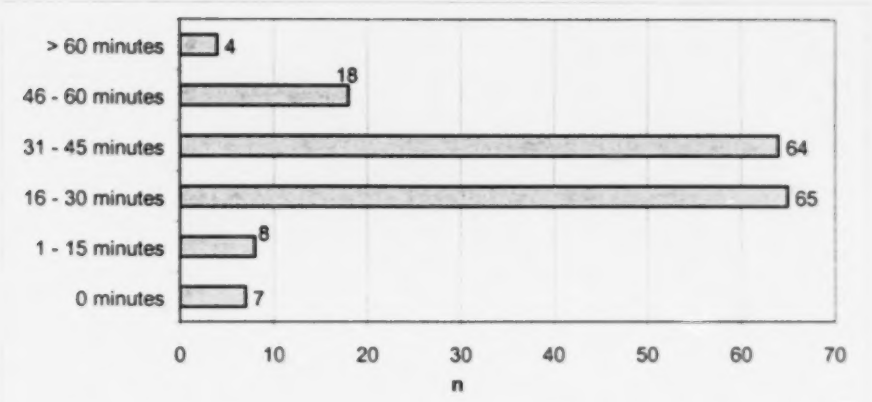

Figure 1. Minutes per session students are willing to spend on a three-credit hour course provided through the Internet (not including the completion of assignments), Texas A&M University, Fall 1999 and Spring 2000 (n=166).

evaluated test questions (see Table 4). This finding, when associated with the Likert-type question focused on the "importance of graphics for understanding," lends further support to the preference of using graphics in instruction with a mean of 3.96 (SD = .8182). While text was ranked fourth in the students' order of preference, it is important to note that the ability to print online text was indicated as being very important to the students (Mean = 4.27, SD = .703).

Table 4. Ranking of Preference for Information to be Presented, Undergraduate Students, Texas A&M University, Fall 1999 and Spring 2000 (n=166).

	n					*Avg. Ranking
	1st	2nd	3rd	4th	5th	
Audio (comments, explanations, etc.) (n=164)	42	46	41	24	11	2.49
Graphics (pictures, diagrams, etc.) (n=163)	41	36	44	27	15	2.63
Video (n=163)	44	36	35	31	17	2.64
Text (Chapters, Articles, etc.) (n=163)	26	31	23	31	52	3.32
Self-Evaluated Test Questions (n=163)	15	18	21	45	64	3.77

*1 indicating highest preference

As revealed in Table 5, approximately 62% of students ranked "traditional classroom course" as their preferred delivery method for college courses. Approximately 26% of students ranked "Stand-alone Internet course" as their preferred delivery method. The other delivery methods, "Written Correspondence Course," "Course delivered via Video Conference" and "Facilitated Internet Course," were preferred by only 12% of the students.

Table 5. Ranking of Course Delivery Preference of Undergraduate Students, Texas A&M University, Fall 1999 and Spring 2000 (n=166).

	n					*Avg.
	1st	2nd	3rd	4th	5th	
Traditional Classroom Course (n=164)	102	23	17	13	9	1.80
Stand-alone Internet Course (n=165)	44	39	25	36	21	2.70
Facilitated Internet Course (n=164)	6	44	46	36	32	3.27
Video Conference Course (n=164)	8	34	43	40	39	3.41
Written Correspondence Course (n=164)	2	33	35	34	60	3.71

*1 indicating highest preference

Students were asked, "While participating in an online course, which option would you prefer? 100% of the course be taught online Course material be taught online, with a monthly class meeting; Course material be taught online with a lab that meets once/week; I would not want to participate in an online course." As revealed in Figure 2, only 12.7% selected not to participate when given the option of selecting an Internet-based course with either a weekly or monthly meeting. In fact, the majority (76.3%) of the students opted to participate in an onlinecourse that included a regularly scheduled meeting.

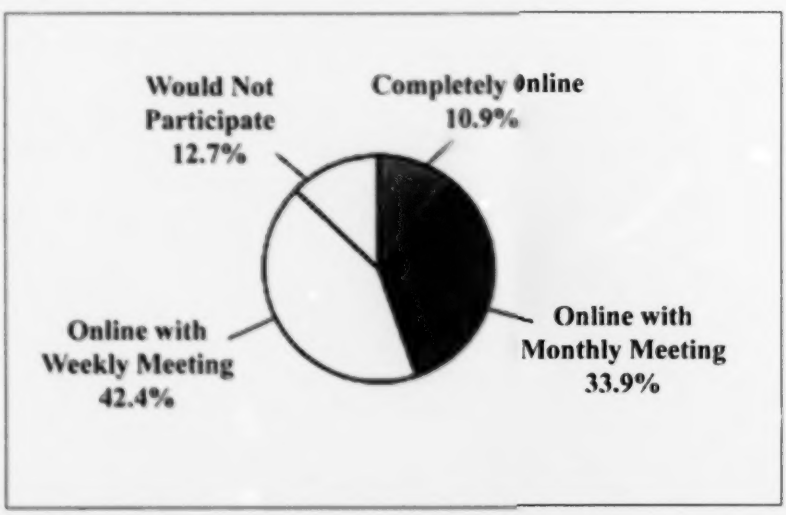

Figure 2. Undergraduate Students Preferred Option when Participating in an Online Course, Texas A&M University, Fall 1999 and Spring 2000 (n=166).

When asked, "How many questions do you ask to the instructor during a typical 50-minute classroom lecture of a course similar to AGED 340," almost half of the students responded that they do not ask any questions. As revealed in Figure 3, only 18% of the students reported asking two or more questions. Evaluation of the responses to the Likert-type questions related to "importance of instructor interaction" and "importance of classmate interaction," reveal that students do believe classmate interaction to be important but do not believe instructor interaction to be important (see Table 1 for means and standard deviations).

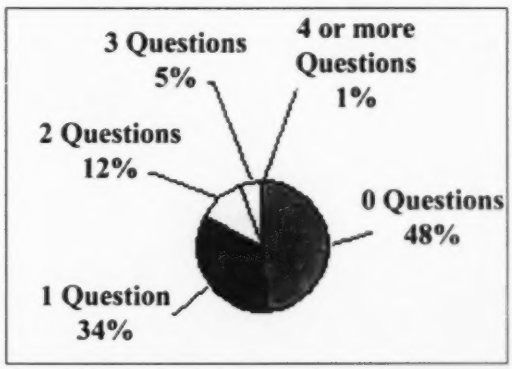

Figure 3. Number of Questions Asked in A Typical Lecture by Undergraduate Students, Texas A&M University, Fall 1999 and Spring 2000 (n=166).

Conclusions

Overall, students indicated an interest in participating in courses delivered via the Internet. While 60.8% of the students responded that they would have been interested in taking AGED 340 via the Internet, it is interesting to note that when the students were asked to select an option of methods to receive an Internet-based course (including the option not to participate), over 87% selected an option to participate. In fact, 76.3% preferred that the course material be taught online with a regularly scheduled meeting with the instructor and other students. In contrast, students expressed only slight interest according to the Likert-type scale, "Interest in Taking Courses Via the Internet" (mean = 3.77). This discrepancy might be explained by the wording of the questions in that scale. Two of the three questions used in the scale reflect the students' interest in the flexibility and independence offered by Internet courses. Given the current structure of the course (two one-hour lectures and a one-hour small group laboratory per week), it is believed that students have interest in online instruction that includes a traditional lab. This leads one to conclude that students are more comfortable with an online course when there is a scheduled meeting that accompanies it.

It was postulated that the greater the number of hours per week that a student was employed, the greater would be their interest in taking courses through the Internet. More than half of the students were employed in some capacity; however, no significant relationships were discovered between interest in online courses and the number of hours

worked. In fact, no significant relationships were discovered between any of the students' personal characteristics examined and their interest in taking Internet-based courses. Thus, one could conclude that interest in Internet-based courses could be based on factors other than the personal characteristics examined.

Based on student responses regarding time commitment to an Internet-based course, it can be concluded that students preferred modules to be limited to an average of 30 minutes/session and they expected to spend the same amount of time online per week as in a traditional classroom. Students interested in taking courses via the Internet did not feel that classmate interaction was as important as do students who preferred traditional classroom instruction. Less than 2% of the students indicated that no discussion occurred during a typical classroom lecture, however, almost half of the students indicated that they do not ask questions of the instructor during class. Given the highly interactive nature of the laboratory sessions, this is understandable. These findings support "discussion" as an important facet of instructional design. According to student responses, it can be concluded that students believe the use of audio and graphics in online course delivery to be important in helping them learn.

It can be concluded that students who prefer classmate interaction are less interested in online delivery than those who did not rank classmate interaction as important. Because 62% of the students ranked traditional classroom delivery as their first choice, one can conclude that this was their preferred delivery option. However, when traditional classroom delivery is not a viable delivery option, stand-alone Internet courses with periodic meetings would be their next preference.

Implications and Recommendations

The implications for developing quality online educational courses create challenges and opportunities to those who seek to offer quality learning experiences. This study sought to determine whether there would be interest in delivering AGED 340 via the Internet, if there were student characteristics that would influence interest, and further sought to determine particular features and characteristics that should be incorporated into the course to make it as effective as possible. The educational importance of the study relates to the need for the course to be delivered to larger numbers of students with the same number of faculty and teaching assistants. Further, the importance lies in the desire to develop learner-centered instruction.

This study did not reveal any personal characteristics that proved to impact interest in receiving a course via the Internet. It is recommended that further research be conducted to determine if characteristics not examined in this study (i.e., learning styles, etc.) influence interest in specific online courses. Understanding factors that influence interest can assist instructional designers in addressing issues related to specific groups.

Given the fact that students are interested in receiving AGED 340 and other courses via the Internet, it is recommended that AGED 340 and other courses be considered for online delivery. Scheduled meetings, either weekly or monthly, are

perceived by students to be an important part of the course. Based on the current structure of the course, it is believed that students enjoy the lab component. Thus, it is up to the course designer to develop new and innovative methods to allow this characteristic to continue. The students indicated that audio and graphics helped them to learn better. We must continue to strive to take complicated parts of a body of knowledge and break them down by using graphics and audio to provide learning opportunities. In addition, the value of simulations and animations in instructional design should be examined for their effect on learning and used appropriately. It is important to remember that as noted in an article by Madjidi, Hughes, Johnson, and Cary (1999), one needs to not replicate the traditional classroom, but create a more learner-centered approach. This study provides baseline information that can assist in the development of an online leadership course to meet current needs.

References

Bass, Bernard & Avolio, Bruce J. (1994). Improving organizational effectiveness through transformational leadership. Sage Publications.

Bennis, Warren. (1989). On Becoming a Leader. Jossey-Bass.

Burns, James MacGregor. (1978). Leadership. Harper.

Fasce, E., Ramirez, L., & Ibanez, P. (1995). Assessment of an independent and computer-based study program applied to fourth year medical students. Revista Medica de Chile, 123(6), 700-705.

Gatchell, D. L., Harris, J., Rhos, R., Whiteside, J., Hyers, L., Shumway, P., Langone, C., Heusel, G., & Rodekohr, J. (1989). Youth leadership: Heirs to our future. Athens, GA: The University of Georgia Extension.

Green, K. C. (1998). Campus Computing, 1998. The Ninth National Survey of Desktop Computing and Information Technology in American Higher Education. Encino, CA: Campus Computing.

Green, M. F., (1992). Developing Effective Leaders: Can It Be Done? Innovative Higher Education. 17(1), 57-69.

Higher Education Research Institute. (1995). A Social Change Model of Leadership Development. Los Angeles: University of California, Los Angeles Press.

Inglis, T., Fu, B., & Kwokchan, L. (1995). Teaching microbiology with hypertext – first steps towards a virtual textbook. Medical Education, 29(6), 393-396.

Jones, L., & Kane, D. J. (1994). Student evaluation of computer-based instruction in a large university mechanics course. American Journal of Physics, 62(9), 832-836.

Kouzes, J. M. & Posner, B. Z. (1987). The Leadership Challenge. San Francisco: Jossey-Bass.

Madjidi, F., Woodrow, H. H., Johnson, R. N., & Cary, K. (1999). Virtual Learning Environments. (ERIC Document Reproduction Service No. ED 429565).

Nunnally, J. C. (1967). Psychometric theory. New York: McGraw-Hill Book Company.

O'Kane, M., & Armstrong, J. D. (1997). Developing course materials using the world wide web. NACTA Journal, 41(2), 10-12.

Russell, T. L. (1999). The No Significant Difference Phenomenon. Raleigh, NC: Office of Instructional Telecommunications.

Tothcohen, S. (1995). Computer-assisted instruction as a learning resource for applied anatomy and kinesiology in the occupational therapy curriculum. American Journal of Occupational Therapy, 49(8), 821-827.

Willis, A. (1998). Effective practice: The view from across the nation. Social Studies Review, 38(1), 18-20.